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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,512

07/16/2003

Raymond W. Blasingame

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EXAMINER

SANGHAVI, HEMANG

ART UNIT

PAPER NUMBER

2874

MAIL DATE

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04/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/620,512	Applicant(s) BLASINGAME ET AL.	
	Examiner HEMANG SANGHAVI	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-9 and 35-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-4, 6-9, 35-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment/Arguments

The amendment filed on March 27, 2008 has been entered. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-4, 6-9, 35, 42, and 46-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al (US 2003/0095760).

Lee et al discloses an optical subassembly comprising (Fig. 3):

a sleeve (1) configured to receive an optical fiber connector; a fiber stop (a surface 231 of a cylindrical member 23) comprising a first side proximate the sleeve and a second side opposite the first side, at least a portion of the second side being aspheric; and a lens (3) supported by the fiber stop such that there is a gap between the lens and the second side of the fiber stop. It is inherent that the lens has an index of refraction that is approximately the same as an index of refraction of the fiber stop, since they are made from the same material. As to claims 3-4, 6-7, and 46-48, paragraph [0020], Lee et al

states that the lens holder 2 is integrally made of transparent molded plastic or glass material. As to claims 8-9, and 48, paragraph [0020], Lee et al states that the lens member 3 is a ball lens or an ellipsoidal lens. As to claims 35 and 49, Lee et al discloses an optoelectronic element in Fig. 4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 38-40 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (US 2003/0095760).

Lee et al fails to state the material of the fiber stop being LASFN-9, or BK7. The LASFN-9 and BK7 are commercially available transparent substrate.

Lacking criticality in the specification as to the material for the spacer, the ordinary artisan would have found it obvious at the time of invention to make the spacer from the plastic or glass in the optical module of Lee et al as obvious matter of design choice providing a desired coupling between the laser and the optical fiber.

Claims 36-37, 41, 43 and 50-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (US 2003/0095760) and Levin et al (US 6,758,611 B1).

Lee et al, as applied to claims above, fails to state that an index of refraction of the optical fiber is approximately same as the index of refraction of the fiber stop and the index of refraction of the lens.

Levin et al discloses an optical module comprising: an optical fiber receiving structure (20); and a fiber stop (35) attached to the optical fiber receiving structure; and a lens (39) situated along an optical axis defined by the optical fiber receiving structure and the fiber stop such that there is a gap between the lens and the fiber stop.

In lines 11-15 of column 4, Levin et al teaches that by forming the fiber stop 35 of glass material with an index of refraction similar to the index of refraction of a core of the optical fiber, spreading of the light beam is substantially reduced and lower optical power is required to collimate the beam.

Also, it is extremely well known in the art to utilize matched refractive index components in the optical coupling system to avoid/reduce the reflection between the interfaces of the components.

Thus, from collective teachings of Levin et al and available well known techniques, the ordinary artisan would have found it to be obvious at the time of the

invention to provide the same refractive index for the core of the optical fiber, the stopper, and the lens in the Lee et al for the purpose of advantageously reducing the spreading of the light beam and lower optical power requirements, hence increasing life of the module.

Lee et al fails to state the material of the fiber stop being LASFN-9, or BK7. The LASFN-9 and BK7 are commercially available transparent substrate.

Lacking criticality in the specification as to the material for the spacer, the ordinary artisan would have found it obvious at the time of invention to make the spacer from the plastic or glass in the optical module of Lee et al as obvious matter of design choice providing a desired coupling between the laser and the optical fiber.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemang Sanghavi whose telephone number is (571) 272-9955. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hemang Sanghavi/
Primary Examiner
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HS

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